E 8401 (Pages : 2) Reg. No. 42852

Name. Fathima

B.Sc. (BIOTECHNOLOGY—MODEL III) DEGREE (CBCS) EXAMINATION JANUARY/FEBRUARY 2018

First Semester

B.Sc. Biotechnology

Core—METHODOLOGY IN BIOTECHNOLOGY

(2017 Admissions)

Time : Three Hours Maximum Marks : 60

Part A

Answer any **ten** *questions.*
Each question carries 1 *mark.*

1. Define Nanobiotechnology.
2. Expand IPR.
3. Name world's first cloned buffalo.
4. What are quantum dots ?
5. What is the importance of NCBI ?
6. Give the names of any 2 restriction enzymes.
7. Define white Biotechnology.
8. Expand GMO. Give an example.
9. Define artificial cell.
10. What is a plasmid ?
11. Which fungus is cultivated for industrial penicillin production ?
12. What is a nanocrystal ?

(10 × 1 = 10)

Turn over

Part B

Answer any **six** *questions.*
Each question carries 5 *marks.*

13. Describe the outcomes of HGP.
14. Explain the merits and demerits of GMO.
15. What are the steps in patenting ?
16. Give the principles of cloning.
17. What are biological databases ? Discuss their importance with examples.
18. Define GMP. What are the components of GMP ?
19. Explain the role of conventional practices in marine fermented food production.
20. Describe the scope of Biotechnology in space research.
21. Mention any four advantages of bioprocess technology.

(6 × 5 = 30)

Part C

Answer any **two** *questions.*
Each question carries 10 *marks.*

22. Discuss in detail on the synthesis and applications of artificial cells.
23. Elaborate on the applications of nano biotechnology in medicine and health.
24. Explain the scope, importance of Biotechnology in various fields and its impact on our society.
25. Describe the basic process of fermentation and give an account of fermented food products.

(2 × 10 = 20)